



Commonwealth of
Massachusetts
EOHHS

Prescriber Profile Report

Indicator and Product Data Dictionary



Introduction and Description

General:

Each individual prescriber profile report contains several cost and utilization measures in addition to demographic information based on the claims received for the fee-for-service MassHealth members the prescriber has serviced during the quarter. The first report (PPR1) was released in November of 2003 and covered three calendar quarters; the previous quarters are for trending purposes. Another quarter will be added for trending each report cycle until a maximum of four quarters has been reached. In an effort to cover the majority of claims and minimize the number of prescribers the report will be mailed to, only prescribers with 200 or more prescriptions dispensed to fee-for-service MassHealth members in the quarter under study will be profiled. Benchmarks of the 10th or 90th percentile for each performance indicator on the prescribers practicing in the same specialty are provided for comparison rates among the prescriber's peers.

Data sources:

The primary source of data is the MMIS database of paid pharmacy claims, originating from ACS, the company that manages the MassHealth Pharmacy Online Processing System (POPS). These data are supplemented with drug reference information from First DataBank (FDB) and ACS, and address and specialty information from Folio, Inc. (a company that offers information about prescribers), ACS, and MMIS. MassHealth provider status was determined from MMIS provider data. In terms of processing, preference is given to the FDB drug reference information and Folio, then MMIS, and lastly ACS provider address and specialty information. Since there are ongoing issues with the identification of brand and generic prescriptions via FDB, pharmacists from MBHP and OCA resolved those conflicts for the initial report and will need to address new drug names each reporting cycle.

Restrictions:

Over-the-counter (OTC) drugs and medical supplies were excluded. High-cost drugs and medications for certain conditions such as HIV, hemophilia, cancer, and diabetes are also excluded. See Table 1 below for a complete list of therapeutic classes and examples of those medications excluded from this study. Claims for members with third-party-liability insurance (TPL) on the date the prescription was dispensed are also excluded. Although pharmacy claims are typically processed much sooner than medical claims, an allowance of two months' lag has been given so that the majority of claims occurring during the reporting cycle are accounted for in these analyses.

| Therapeutic Code (HIC3) | Therapeutic Class Description | Example Drug Name |
|-------------------------|---|-------------------|
| B1B | Pulmonary antihypertension, endothelin | Tracleer |
| B1C | Pulmonary antihypertension, prostaglandin | Flolan |
| B3A | Mucolytics | Pulmozyme |
| C5O | Solutions, Miscellaneous | Flolan diluent |
| D6A | Drugs to treat chronic inflammation | Remicade |
| H0E | Agents to treat multiple sclerosis | Copaxone |

| | | |
|-------------------|---|-------------------|
| H6I | Drugs to treat amyotrophic lateral sclerosis | Rilutek |
| M0E | Antihemophilic factors | Kogenate |
| M0F | Factor IX preparations | factor IX complex |
| M9T | Thrombin inhibitor selective | argatroban |
| N1B | Hematinics, other | Epogen |
| N1C | Leukocyte (WBC) stimulants | Neupogen |
| N1D | Platelet reducing agents | Agrylin |
| N1E | Platelet proliferation stimulants | Neumega |
| P1A | Growth hormones | Humatrope |
| P1B | Somatostatic agents | Sandostatin |
| P1M | LHRH (GNRH) agonist analogs | Synarel |
| P1P | LHRH (GNRH) agonist pituitary suppressants- central precocious puberty | leuprolide |
| S2H | Anti-inflammatory/antiarthritic | Synvisc |
| S2J | Anti-inflammatory/tumor necrosis | Humira, Enbrel |
| S2M | Anti-inflammatory/interleukin-1 receptors | Kineret |
| S7A | Neuromuscular blocking agents | Botox |
| V1A | Alkylating agents | Cytosan |
| V1B | Antimetabolics | Xeloda |
| V1C | Vinca alkaloids | vincristine |
| V1D | Antibiotic antineoplastics | doxorubicin |
| V1E | Steroid antineoplastics | Megace |
| V1F | Antineoplastics, miscellaneous | Vepesid, Taxol |
| V1I | Antidote agents | leucovorin |
| V1J | Antiandrogenic agents | Casodex |
| V1K | Antineoplastics antibody/antibody drug complexes | Herceptin |
| V1N | Selective Retinoid X receptor agonists | Targetin gel |
| V1O | Antineoplastics LHRH (GNRH) agonist | leuprolide |
| V1Q | Antineoplastic systemic enzyme | Gleevac |
| V1W (new in PPR4) | Atineoplastic, EGF receptor blocker recomb MC antibody | Herceptin |

| | | |
|-------------------|--|-----------------------------|
| V1X (new in PPR4) | Antineoplastic, HUM VEGF inhibitor recomb MC antibody | Avastin |
| W1M | Streptogramins | Synercid |
| W1O | Oxazolidinones | Zyvox |
| W4K | Antiprotozoal drugs, miscellaneous | atovaquone |
| W5C | Antivirals, HIV-specific, protease inhibitor | Invirase |
| W5D | Antiviral monoclonal antibodies | Synagis |
| W5G | Hepatitis C treatment | Rebetol |
| W5I | Antivirals, HIV-specific, nucleotide analog RTI | Viread |
| W5J | Antivirals, HIV-specific, nucleoside analog, RTI | Zerit |
| W5K | Antivirals, HIV-specific, non-nucleoside, RTI | Viramune, Sustiva |
| W5L | Antivirals, HIV-specific, nucleoside analog, RTI combination | Combivir, Trizivir |
| W5M | Antivirals, HIV-specific, protease inhibitor combination | Kaletra |
| W5N (new in PPR3) | Antivirals, HIV-specific, fusion inhibitors | Fuzeon |
| W7K | Hepatitis B treatment | Hepatitis B immune globulin |
| Z1D | Enzyme replacements (ubiquitous) | imiglucerase |
| Z2E | Immunosuppressives | Sandimmune |
| Z2G | Immunomodulators | Intron A |
| Z2L (new in PPR3) | Monoclonal antibodies to Immunoglobulin E (IGE) | Xolair |

Identifying a Prescription

Since each claim may be for various days' supply, the HEDIS definition of a dispensing event has been adopted for identifying a prescription. Therefore, *a prescription = one dispensing event*.

Dispensing events = ceiling (days' supply ÷ 30). A days' supply of 30 or less is equal to one dispensing event, a days' supply of 31-60 days is two dispensing events, 61-90 days is three dispensing events, etc.

Unless the measure is for total cost of a drug or a therapeutic class, a prescription's cost and number of times that cost is reflected in calculations is determined by the number of dispensing events. Therefore, Adjusted cost = MassHealth cost ÷ number of dispensing events.

Individual Prescriber Reports

Demographics and Indicators

Prescriber Demographics

Prescriber: The prescriber's first name, middle initial, last name, and credentials are from the available data sources, Folio, ACS, or MMIS. The name is that linked to the DEA number and may not always be an individual prescriber. Some DEA numbers have no match in any of the available data sources and will be identified as "Unknown" and the DEA number, until the prescriber is identified.

Specialty: The specialty grouping based on the primary specialty code from Folio, MMIS, or ACS is included. If a prescriber is not identified in the Folio database, MMIS first informational specialty code is used, and if the prescriber is also not identified in MMIS, the ACS specialty code is used. Specialty groups include allergy/pulmonology, cardiology, critical care medicine, endocrinology, family practice, gastroenterology, geriatrics (added in PPR2), hematology/oncology, infectious disease, internal medicine, neurology, obstetrics/gynecology, orthopedic surgery, other, other medical specialty, pediatrics, psychiatry, surgical specialty, unknown, facility, nurse, and pharmacy. Groups for rheumatology, nephrology, physicians assistant, nurse midwife, and psychiatric nurse are being considered. Where prescribers have requested a change or pharmacists have resolved multi-specialty conflicts, prescribers have been categorized into the specialty of choice.

Address: The prescriber's address consists of the street, city, state, and zip code from Folio, MMIS, or ACS.

Prescribers in specialty: The number of prescribers in the same specialty group as the prescriber being reported on is included.

MassHealth provider number: If the DEA matches a provider in the MassHealth provider data, the most recent MassHealth provider number the DEA is linked to will be listed.

Group number, if applicable: If the prescriber is currently enrolled with a group practice according to the MMIS provider data, the MassHealth group number will be listed. If the prescriber belongs to multiple groups, the group number listed will be the group number under which the prescriber most recently enrolled. If the prescriber is not identified in MMIS or does not belong to a group practice, the group number is blank,

Total prescriptions dispensed: The number of prescriptions dispensed under the prescriber's DEA number during the reporting cycle is listed. This number will be 200 or more for all profiled prescribers.

Group name: If there is a group number listed, the name corresponding to that number is listed.

Members prescribed for: The number of members with prescriptions dispensed under the prescriber's DEA number is listed.

Member Demographics

Age: Age is calculated as of the last date of dispensing under the prescriber's DEA. A count of members with prescriptions dispensed under the prescriber's DEA is supplied for each age group. The age groups are 0-17, 18-64, and 65+ years.

Gender: A count of male and female members with prescriptions dispensed under the prescriber's DEA is supplied.

Subpopulations: A few subpopulations known to have high pharmacy utilization were selected for identification. They are as follows:

1. **DMH:** a count of members with an open Department of Mental Health case that had prescriptions dispensed under the prescriber's DEA.
2. **Disabled:** a count of the disabled members that had prescriptions dispensed under the prescriber's DEA.
3. **CommonHealth:** a count of the CommonHealth members that had prescriptions dispensed under the prescriber's DEA.
4. **Nursing Facility:** a count of institutionalized members. Those in institutions for a short stay may not be included in this group.
5. **Medicare:** a count of members who are dually eligible for Medicare and MassHealth.

Cost and Utilization Indicators

This section consists of the prescriber's rank and rate for some of the cost and utilization measures. The more stars the prescriber has, the better the prescriber's performance. Several of the measures have very little variability, so a couple of the quartiles may actually be the same. When the rate falls under multiple quartiles, the most favorable quartile is selected. Both lines are based on the current reporting cycle information.

1. **Percentage of brand medications dispensed:** A claim is considered to be for a brand drug if the Generic Therapeutic Drug Indicator (GTI) is set to brand and the dispensed as written (DAW) code is not brand dispensed as generic. A pharmacists' review of all drug names was conducted to determine disagreements between MassHealth and FDB. Corrections were made based on the review, which will be required each reporting cycle.
 - a. The measure is the percentage of brand prescriptions written by the prescriber that were dispensed under the prescriber's DEA number. Formula: $\text{Number of brand prescriptions dispensed} \div \text{Total number of prescriptions dispensed}$
Benchmark= 10th percentile of the specialty.
 - b. The measure is the mean cost of a brand prescription: $\text{total cost of brand prescriptions} \div \text{total number of brand prescription's}$. Benchmark: 10th percentile of the specialty
2. **Percentage of generic medications dispensed:** A claim is considered to be for a generic drug if the GTI is set to B-rated generic, A-rated generic, or generic with no Orange Book rating, or the GTI is brand and the DAW is brand dispensed as generic. A pharmacists' review of all drug names was conducted to determine disagreements between MassHealth and FDB. Corrections were made based on the review, which will

be required each reporting cycle. This measure includes proper generics and brand medications dispensed as generics since the cost to MassHealth is the generic cost.

- a. The measure is the percentage of generic prescriptions written by the prescriber. Formula: $\text{Number of generic prescriptions dispensed} \div \text{Total number of prescriptions dispensed}$. Benchmark= 90th percentile *Beginning in PPR3, this measure is no longer presented on the report.*
 - b. The measure is the mean cost of a generic prescription: $\text{Total cost of generic prescriptions} \div \text{Total number of generic prescriptions}$. Benchmark= 10th percentile *Beginning in PPR3, this measure is no longer presented on the report.*
3. **Percentage of controlled substances:** A claim is considered to be for a controlled substance if the DEA code is 2, 3, 4, or 5. These codes are for Drug Classes 2, 3, 4, and 5, respectively. The measure is the percentage of all prescriptions dispensed that were for controlled substances. Formula: $\text{Number of controlled substance prescriptions dispensed} \div \text{Total number of prescriptions dispensed}$. Benchmark= 10th percentile
4. **Number and percentage of members prescribed five or more prescriptions:** Member must have been dispensed five more prescriptions concomitantly for a period of more than 60 continuous days by the same prescriber. Individual medications will be determined by generic name (GNN). *Note: Every day of the study period must be allowable for these criteria; therefore, data up to 90 days prior to the measurement period are required as days' supply of up to 90 days is not unusual.* The measure will be the percentage of members meeting these criteria out of the total number of members with medications dispensed written by the prescriber. Formula: $\text{Number of members with 5+ medications} \div \text{Total number of members for whom prescriptions were dispensed to under the prescribers DEA}$. Benchmark= 10th percentile
5. **Number and percentage of members prescribed four or more brand name drugs by the same prescriber:** Members must have been dispensed four or more brand prescriptions concomitantly. Please refer to the brand indicator description in 1. The overlap of four or more drugs must be for a period of more than 60 continuous days. Individual medications will be determined by GNN. *Note: Every day of the study period must be allowable for these criteria; therefore, data up to 90 days prior to the measurement period are required as a days' supply of up to 90 days is allowed.* The measure will be a percentage of the members meeting these criteria out of the total members with medication dispensed by the prescriber. Formula: $\text{Number of members with 4+ brand medications} \div \text{Total number of members for whom prescriptions were dispensed under the prescribers DEA number}$. Benchmark= 10th percentile. *Beginning in PPR3, this measure is no longer presented on the report.*
6. **Number and percentage of brand name prescriptions where an A-rated generic was available:** A claim will be considered to be brand with an A-rated generic available if it is for a brand prescription as described in 1, and if the Orange Book code begins with an "A", which should include the following Orange Book Codes taken from FDB.
 - AA: Products with no known bioequivalence problems in conventional dose forms
 - AB: Products meeting necessary bioequivalence requirements
 - AN: Solutions and powders for aerolization that are marked for use in any of several delivery systems. Drugs that are marketed for only a single delivery system or are a component of a specific delivery system are not included.
 - AO: Injectable aqueous solutions including dry powders, concentrated solutions, or ready-to-use solutions are considered pharmaceutically and therapeutically equivalent if they produce the same concentration and are labeled similarly.
 - AT: Topical products therapeutically equivalent in same dosage form
 - a. The measure is the percentage of prescriptions meeting these criteria out of all prescriptions dispensed under the prescriber's DEA number. The prescription must be

an original prescription or the refill of an original prescription at which time an A-rated generic must have been available. The date written field on the pharmacy claim will be considered to be the date the prescription was actually written and this date will be compared to the Orange Book rating effective date. If the date written is later than the effective date for an A-rated generic, the claim will be considered to have met the brand prior-authorization (PA) criteria. Formula: Number of prescriptions dispensed meeting the brand PA criteria ÷ Total number of prescriptions dispensed. Benchmark= 10th percentile. *Beginning in PPR3, this measure is no longer presented on the report.*

- b. Percentage of drugs that do not require prior authorization (PA) per MassHealth Drug List. These identifications will be made using brand name and label name to determine the form of the drug, where necessary. Again, since prescriptions are grand fathered, the prescription considered must be an original prescription or a refill with an original date after the effective PA date for that medication. The date written field on the claim will be used to make this determination. Formula: Number of prescriptions dispensed not meeting the MHDL PA criteria ÷ Total number of prescriptions dispensed. Benchmark 90th percentile. *Beginning in PPR3, this measure is no longer presented on the report.*
7. **Percentage of drugs requiring Prior Authorization (PA):** All prescriptions meeting the brand PA measure and those not meeting the measure 6a criteria are included. However several PA medications have unit restrictions that are not easily applied to the data currently available through MMIS. Therefore, two measures are created: (1) all possible PAs including those with unit restrictions to the best of the ability of the system, and (2) all PAs except for those that are strictly unit PA: Measure (2) is the measure presented on the report beginning in PPR3.
8. **Average cost per prescription:** Total cost of all prescriptions ÷ number of prescriptions. Benchmark= 10th percentile
9. **Average number of prescriptions per member:** Total number of prescriptions ÷ number of members receiving prescriptions under the prescriber's DEA number. Benchmark: = 10th percentile.

Legend

A legend with all the specialty-specific information for the reporting cycle is supplied. The specialty information includes the quartile ranges used to rank the prescriber, the benchmark, and the mean rate for the specialty. A four-star ranking means the prescriber is performing very well in relation to his peers; whereas a one star ranking indicates he is doing worse than most of his peers for that measure. The benchmark is the 10th or 90th percentile, depending on the measure. It is the 90th percentile for the two positive measures, percentage of generic prescriptions dispensed and the percentage of prescriptions from the MassHealth Drug List. All other measures have the 10th percentile benchmark.

Top 10 by Cost and Utilization

Drugs are combined by brand name with all strengths and dosages being combined under the single brand name of the medication so a distinction can be made as to whether the prescriber is writing brand-name or generic prescription versions of the medication. For reference and comparison purposes the prescriber's top 10 drugs by cost and utilization and the prescriber's top 10 therapeutic classes by cost are provided as well as the specialty top 10 drugs and classes by cost and utilization.

1. **Top 10 drugs prescribed by cost.** The total cost of each unique drug description is determined for each prescriber. Those drug descriptors will be sorted by descending total cost and those with the 10 highest costs are selected. Actual cost is provided.
2. **Top 10 drugs prescribed.** The number of each unique drug description is determined for each prescriber. Those drug descriptors will be sorted in descending order and those with the top 10 counts are selected. Actual prescription count is supplied as well.
3. **Top 10 therapy classes prescribed by cost of prescriptions:** Actual total cost is provided for the prescriber and specialty level.

Graphs

For the purpose of trending and visual comparison of the prescriber's rate to the benchmark and the specialty rate, a graph for each cost and utilization indicator is supplied. Since the percentage of brand prescriptions dispensed is the complement of the percentage of generic prescriptions dispensed, only the percentage of generic prescriptions dispensed is supplied. Two previous quarters' information were plotted during the PPR1 reporting cycle. Up to four quarters of information will be plotted when available. If a prescriber did not meet the criteria for profiling during a previous quarter and had fewer than the 100-prescription threshold, plotted points will exist only for quarters where data are available.